



FIRST OPEN SOLICITATION

TRANSFORMATIONAL ENERGY TECHNOLOGIES

PROJECTS:	37	FUNDING YEAR:	2009, 2010
TOTAL INVESTMENT:	\$158.4 million	PROGRAM DIRECTOR:	Multiple
PROJECT DETAILS:	www.arpa-e.energy.gov/ProgramsProjects/OtherProjects.aspx		

PROGRAM

In 2009, ARPA-E issued an open call for the most revolutionary energy technologies to form the agency's inaugural program. The first open solicitation was open to ideas from all energy areas and focused on funding projects already equipped with strong research and development plans for their potentially high-impact technologies. The 37 projects chosen received a level of financial support that could accelerate technical progress and catalyze additional investment from the private sector. After only 2 months, ARPA-E's investment in these projects catalyzed an additional \$33 million in investments.

In response to ARPA-E's first open solicitation, more than 3,700 concept papers flooded into the new agency, which were thoroughly reviewed by a team of 500 scientists and engineers in just 6 months. In the end, 37 projects were selected as ARPA-E's first award recipients, receiving \$158 million in federal funding.

INNOVATION NEED

ARPA-E is the first government agency focused exclusively on funding high-risk, high-reward energy technologies. It selects all projects based on their impact on the agency's mission to reduce U.S. dependence on foreign energy imports, cut energy-related greenhouse gas emissions, improve energy efficiency across all sectors of the U.S. economy, and maintain U.S. leadership in developing and deploying advanced energy technologies.

The projects chosen for ARPA-E's inaugural program were eventually grouped into 10 diverse technology areas: biomass energy, building efficiency, carbon capture, conventional energy, direct solar fuels, energy storage, renewable power, vehicle technologies, waste-heat capture, and water. Many of ARPA-E's first projects helped shape future agency programs dedicated to these technology areas.

POTENTIAL IMPACT

If successful, the game-changing projects from the first open solicitation would help ARPA-E achieve its mission and ensure the U.S. maintains a technological lead in developing and deploying advanced energy technologies.

- **SECURITY:** Increased access to and use of domestically produced renewable energy would help reduce U.S. dependence on foreign oil and increase our nation's energy security.
- **ENVIRONMENT:** Developing new and renewable sources of energy would reduce our reliance on fossil fuels that create harmful greenhouse gas emissions and contribute to global warming.
- **ECONOMY:** Cheaper sources of energy would help the millions of American consumers and small business owners who can't afford the energy they need to live and work.
- **JOB:** Positioning the U.S. as a global leader in advanced energy technologies could create thousands of jobs for American workers in industries like engineering, manufacturing, and construction.